



The U.S. Economy

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US Economics
October 2006

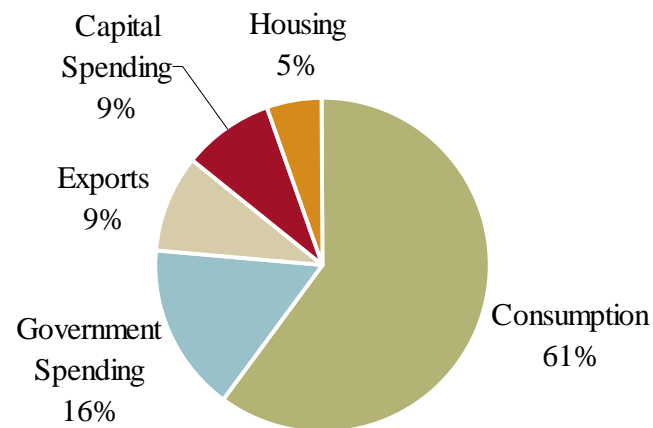


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Drivers of the Economy

Overview

- ◆ **Gross Domestic Product (GDP)** is the value of all output
- ◆ Growth in GDP can be analyzed by dividing spending into 5 categories:
 - Consumption
 - Capital spending
 - Housing
 - Government spending
 - Exports

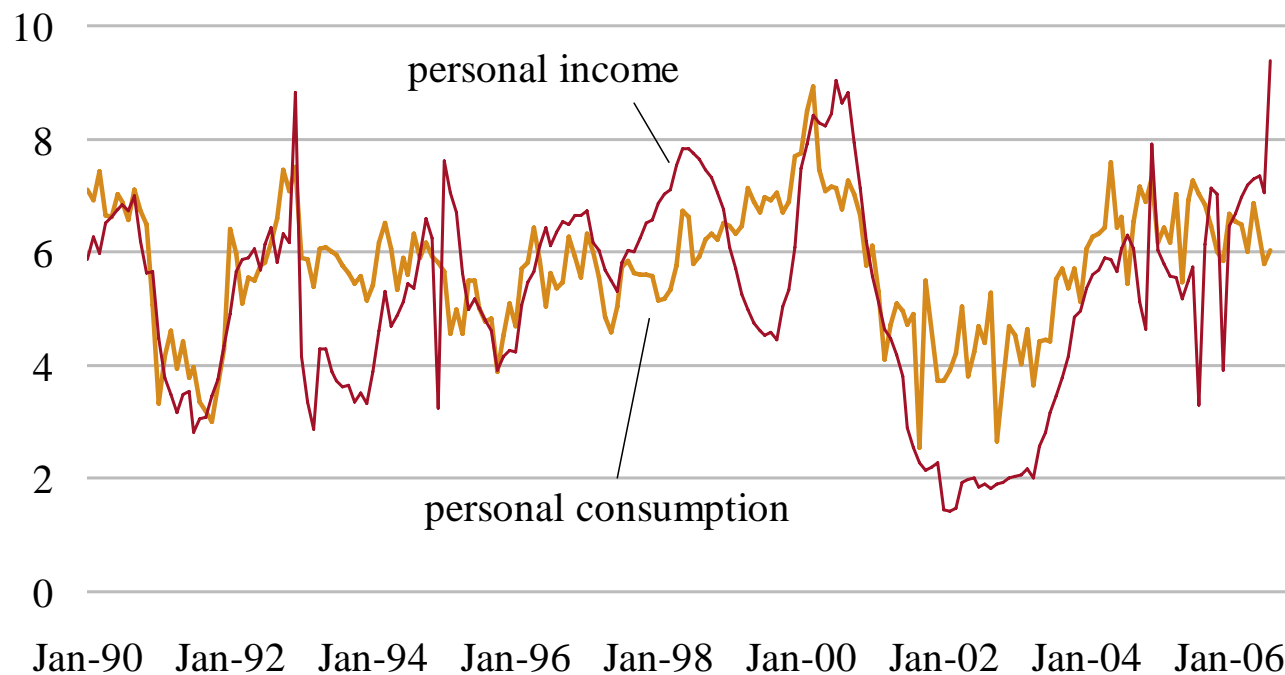


Drivers of Consumption: Income

The primary driver of consumer spending is income growth

- ◆ Income growth depends on:
 - Strength of the job market
 - Growth in wages and salaries

Personal Consumption and Income, %y-o-y



Source: Commerce Department.

Drivers of Consumption: Savings (Lack of?)

Personal saving rates are now slightly negative (i.e. consumers are borrowing faster than they're acquiring new assets)

- ◆ The savings data do not include the price increases (capital gains) on existing holdings of stocks and homes
- ◆ Rapid price increases for stocks and homes have encouraged less savings
- ◆ The savings rate is likely to rise as home prices cool off

Personal Savings Rate, %



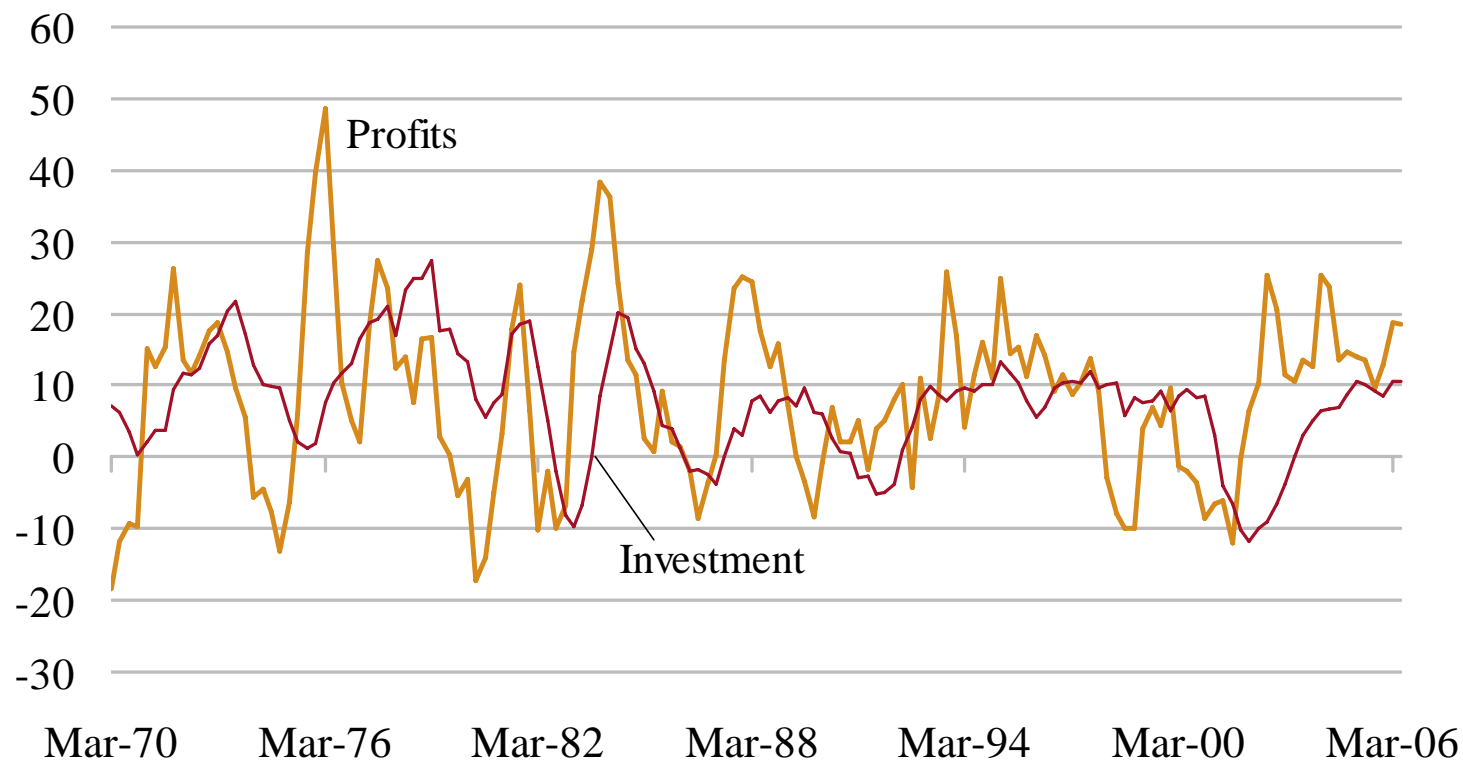
Source: Commerce Department.

Drivers of Capital Spending: Profits

Strong profits tend to encourage capital spending

- ◆ Corporations prefer to fund their investments “internally” with their own cash rather than borrow the money from the markets
 - Borrowing involves interest or dividend payments

Corporate Profits and Investment, %y-o-y



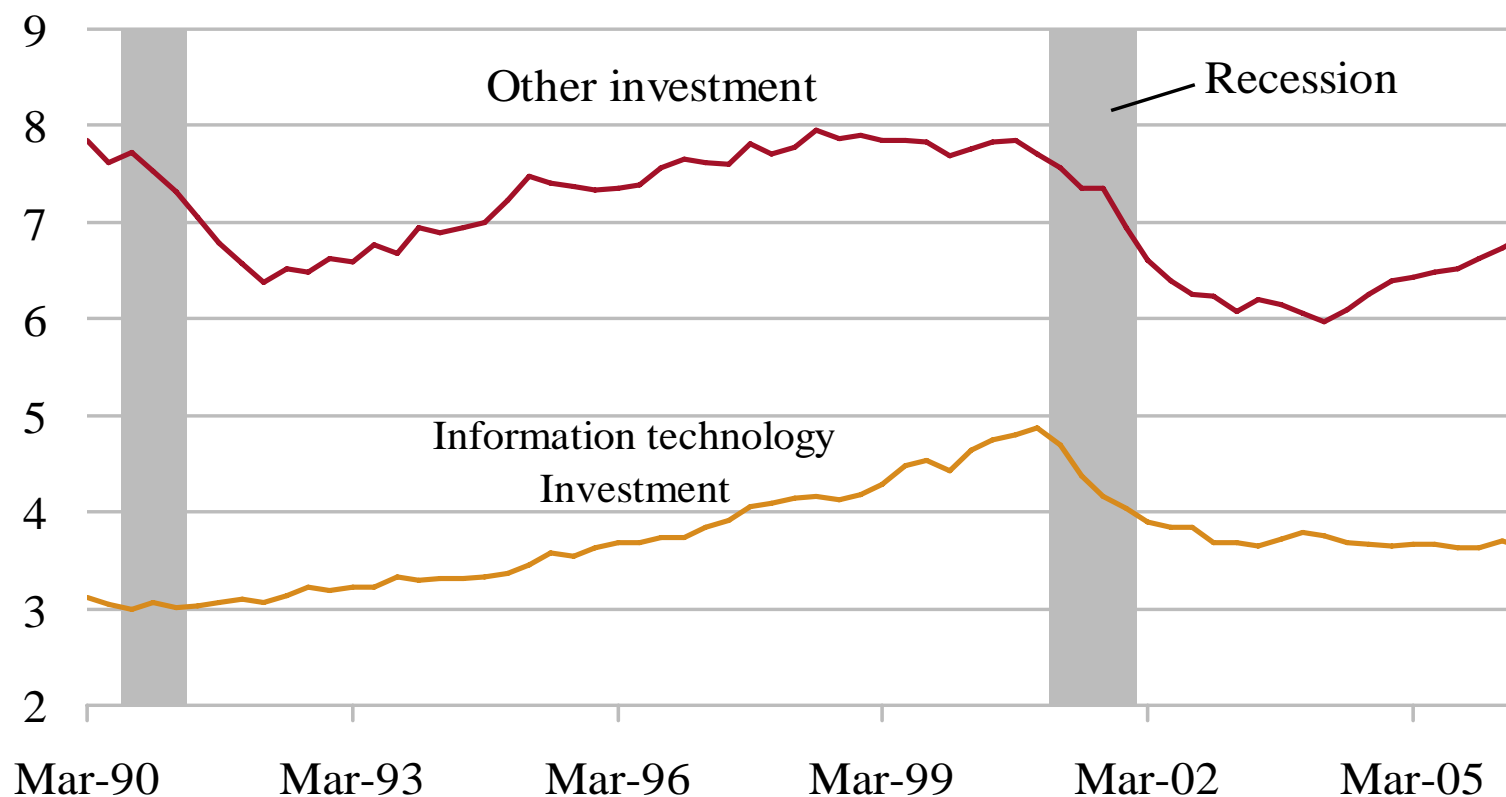
Source: Commerce Department.

Drivers of Capital Spending: New Technology

Rapid technological advance encourages more system upgrades

- ◆ High tech is an increasing share of capital spending
- ◆ The sector has yet to recover from the 1990s over build

Investment Spending as a Share of GDP, %



Source: Commerce Department.

Housing: Prices

Strong home price inflation encourages aggressive home buying

- ◆ Over the last three years home prices have gotten too high in some markets and the supply of new homes has grown at an unsustainable pace
- ◆ Currently, a sharp shift in buyer sentiment is causing a reversal in both building and an abrupt drop in home price inflation

Home Price Inflation, %y-o-y



Source: Office of Federal Housing Enterprise Oversight.

Housing: Rates

Lower mortgage rates make monthly payments more affordable

- ◆ Home demand and construction tend to pick up when mortgage rates are falling and tend to slow when mortgage rates rise
- ◆ Hybrid mortgages with low initial payments have proliferated

Average 30yr Mortgage Rate, %



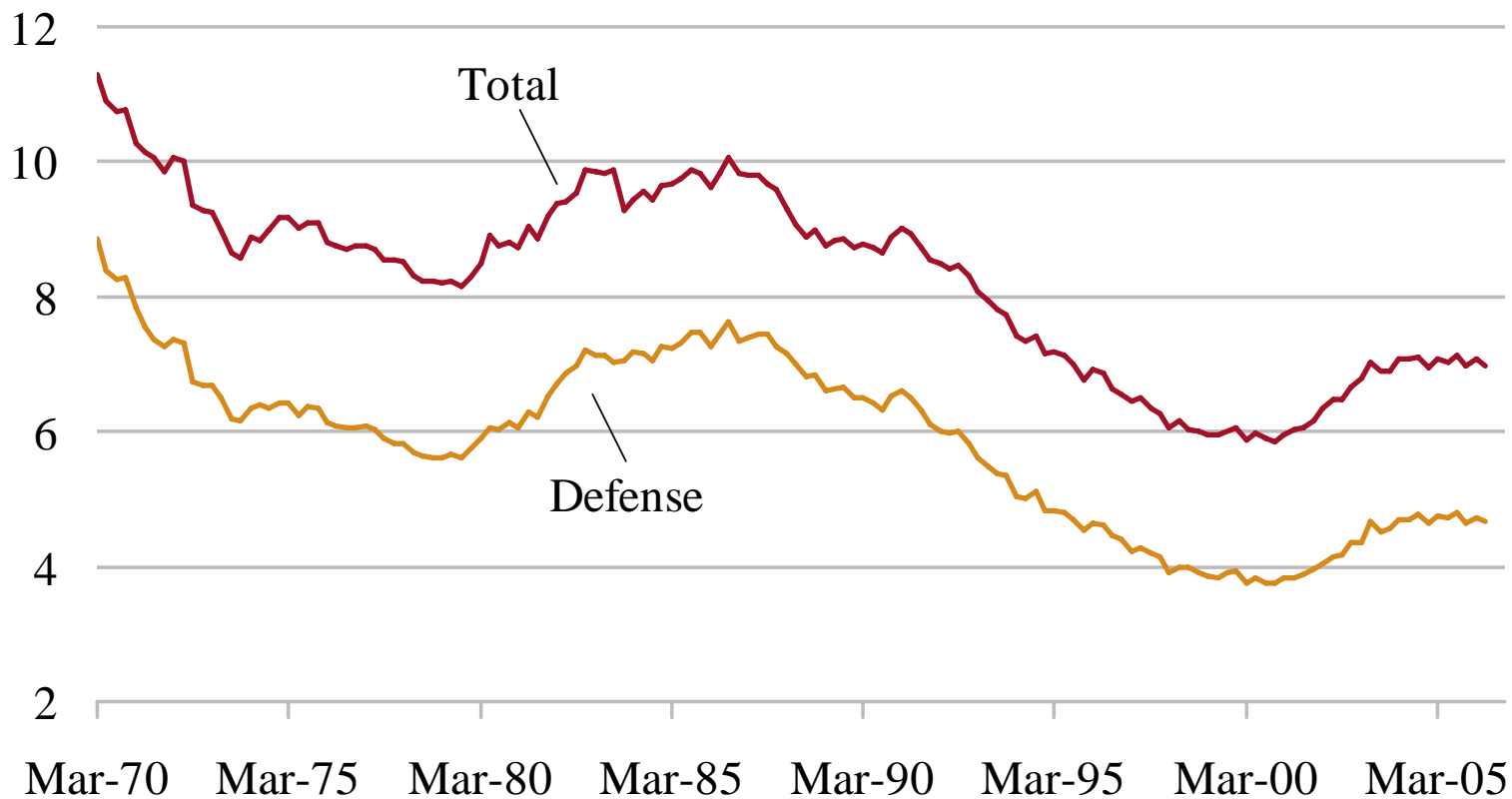
Source: Bloomberg.

Government Spending: Federal

When government spending rises faster than GDP it helps boost overall spending in the economy

- ◆ Defense spending is the major source of fluctuations

Federal Spending, % of GDP



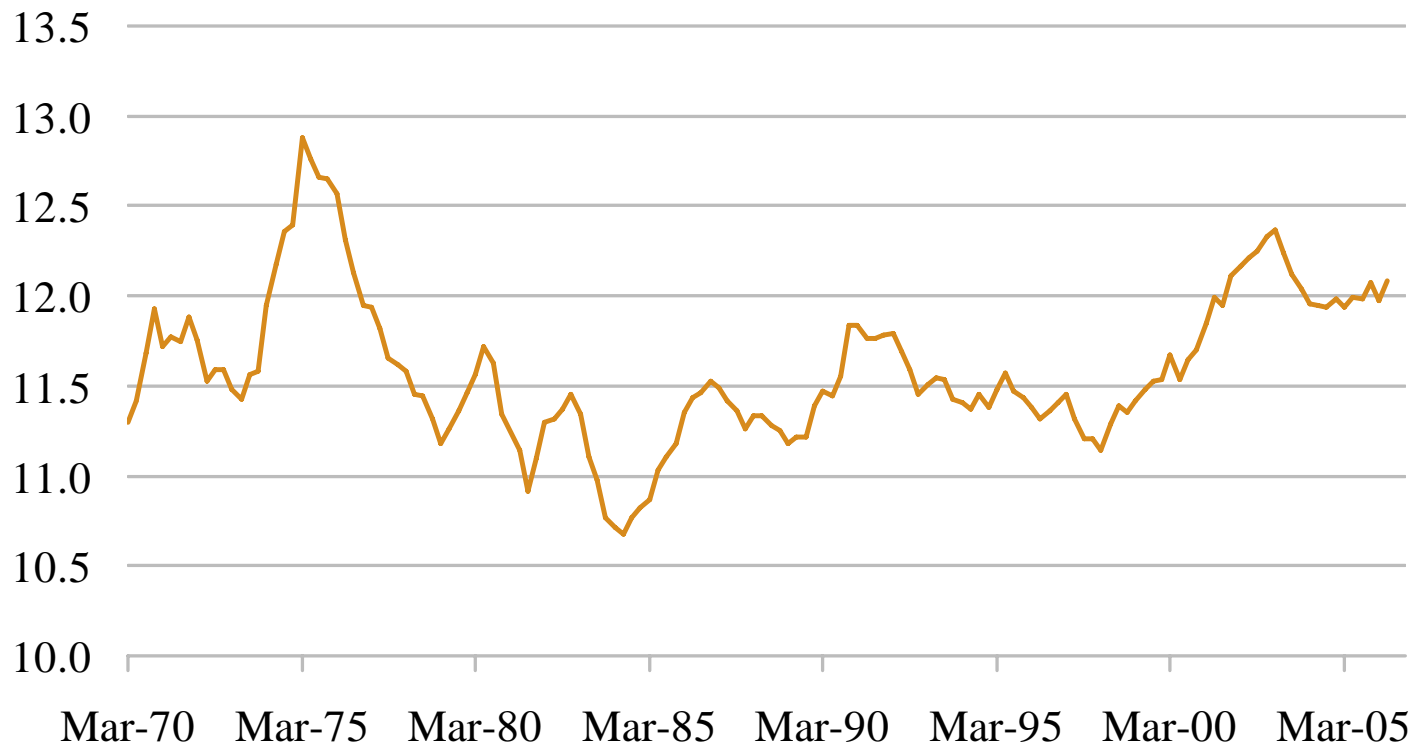
Source: Commerce Department.

Government Spending: State and Local

State and local government spending tends to reinforce economic cycles

- ◆ When local taxes are strong, local spending surges, adding to overall growth
- ◆ Infrastructure booms (e.g. highways) also drive local spending

State and Local Spending, % of GDP



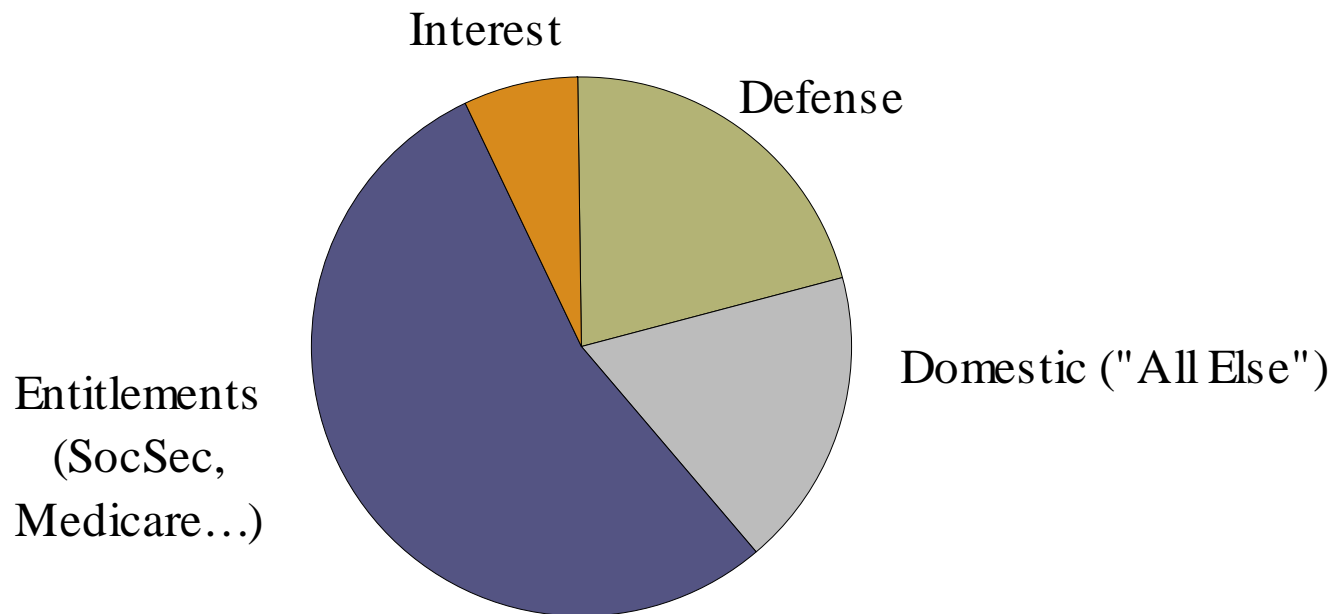
Source: Commerce Department.

Government Spending: Entitlement Costs

Entitlements (social security & medical benefits) are rising rapidly

- ◆ Population is aging and new medical discoveries are adding to the cost of medicine
- ◆ This means a likely steady increase in the budget deficit
- ◆ A large budget deficit puts upward pressure on interest rates

Government Outlays, % of GDP



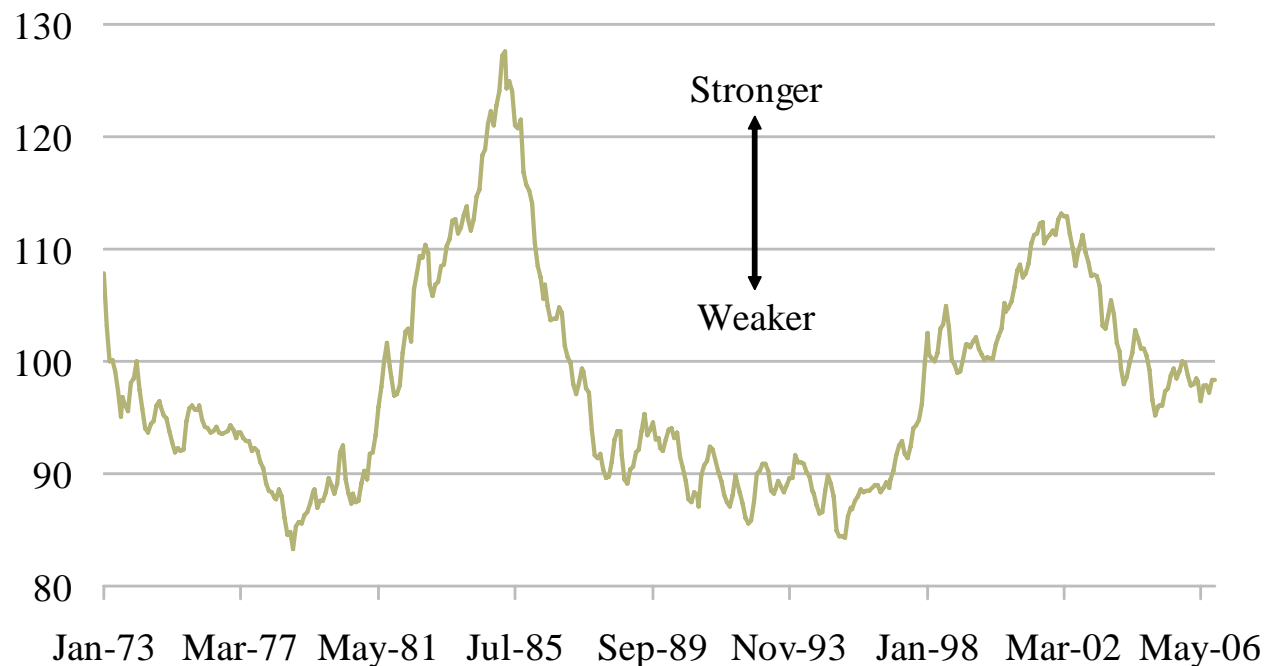
Source: Congressional Budget Office.

Drivers of Exports: The Dollar

The trade-weighted exchange rate is the average value of the US dollar against the currencies of all our trading partners

- ◆ When the dollar weakens, foreigners can receive more dollars in exchange for their currency
- ◆ US products become cheaper to foreigners, encouraging exports

Real Trade-Weighted Dollar Index



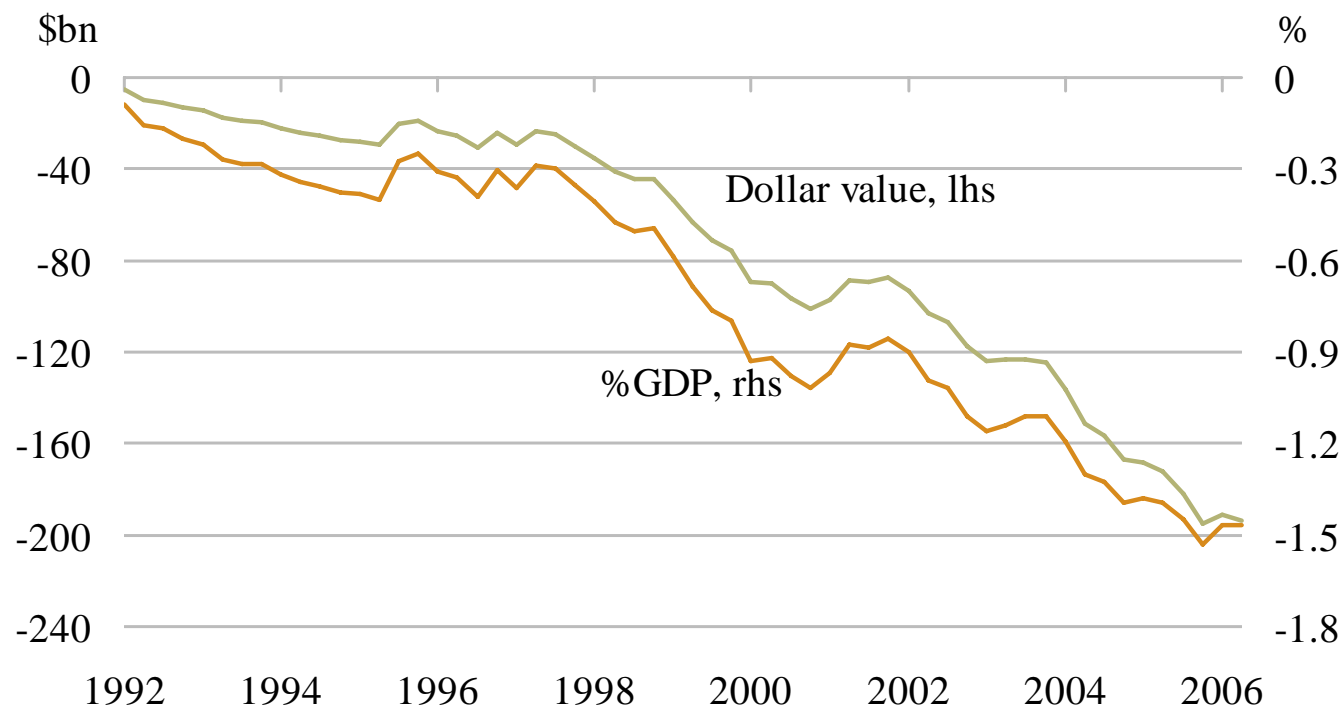
Source: Federal Reserve.

Drivers of Exports: Trade

A widening trade deficit means increased dependence on foreign funding

- ◆ US financial markets are vulnerable to any change in investor sentiment
- ◆ More than half of the trade deficit is financed by Asian central banks

US Trade Balance



Source: Commerce Department.

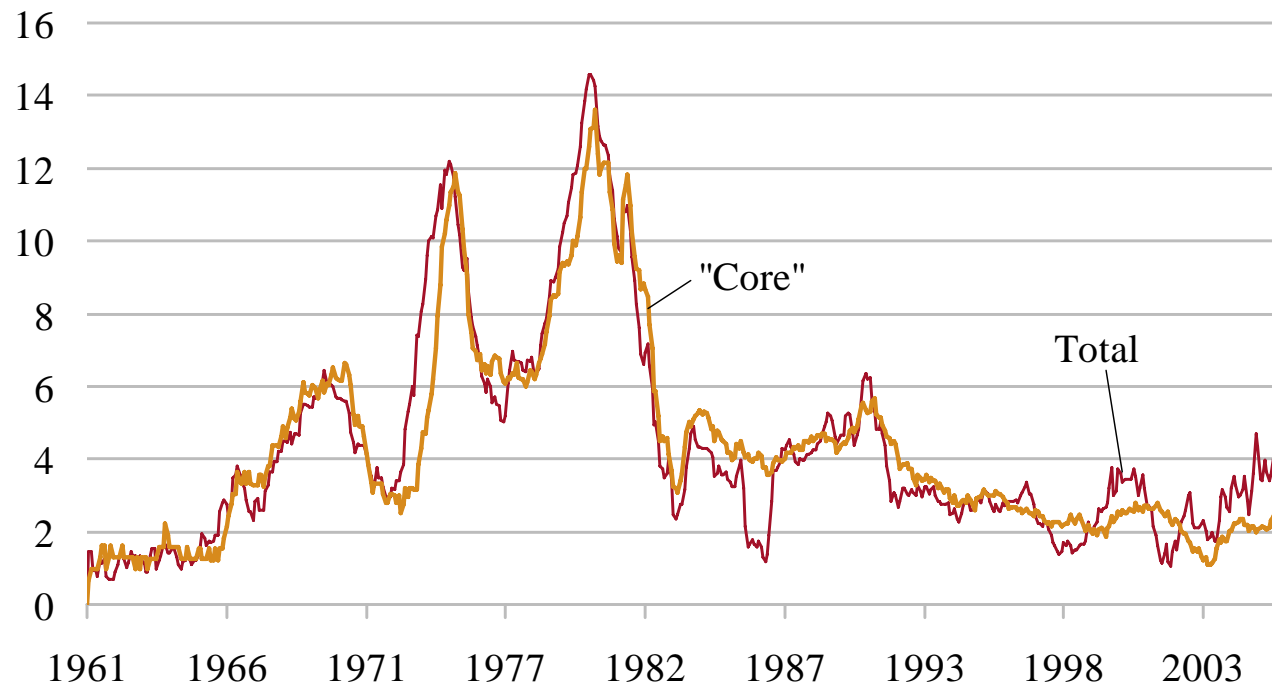
Inflation

Drivers of Inflation

Inflation is a rise in the general price of goods and services

- ◆ The most commonly used inflation barometer is the Consumer Price Index (CPI), which measures the price change over time of a fixed basket of goods & services
- ◆ The “core” CPI excludes food and energy because these prices can have large temporary swings that do not reflect the underlying trend in inflation

Consumer Price Inflation, %y-o-y



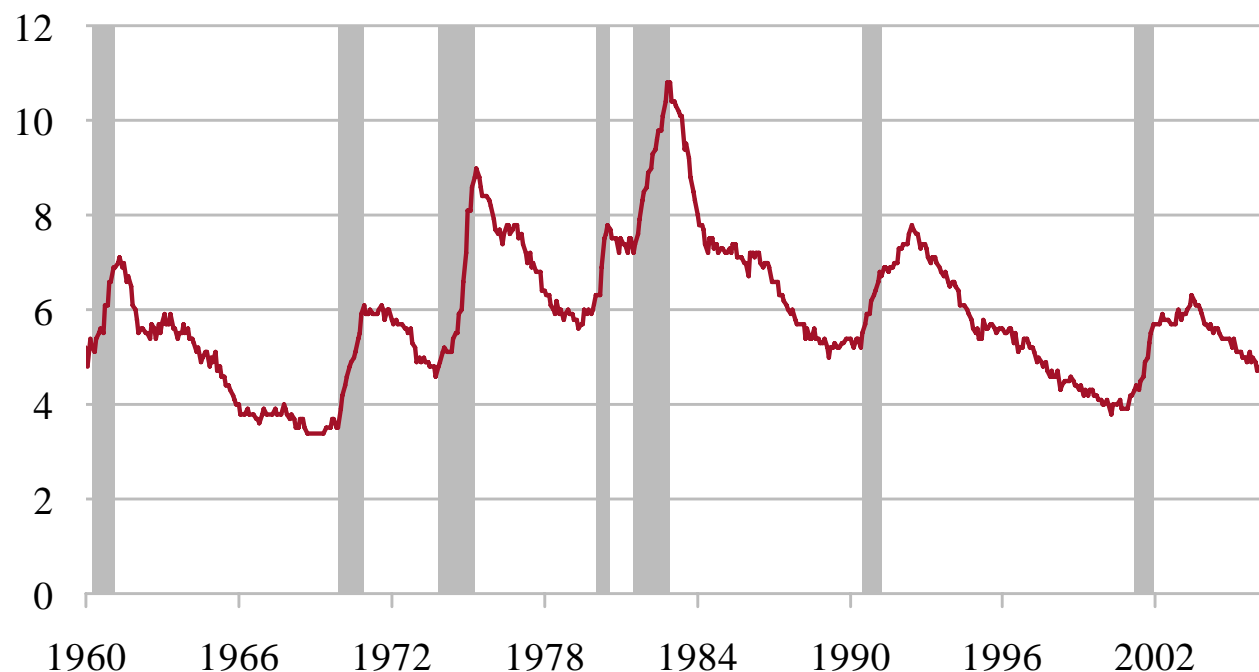
Source: Bureau of Labor Statistics.

Drivers of Inflation: Capacity

The main driver of inflation is “spare capacity” in the economy

- ◆ The unemployment rate is the % of people who want to work but can't find a job
- ◆ When the unemployment rate is below “full employment,” workers gain more bargaining power and wages rise
- ◆ Full employment is about 5% today

Unemployment rate, %



Source : Bureau of Labor Statistics.

Note: Shaded areas denote recessions.

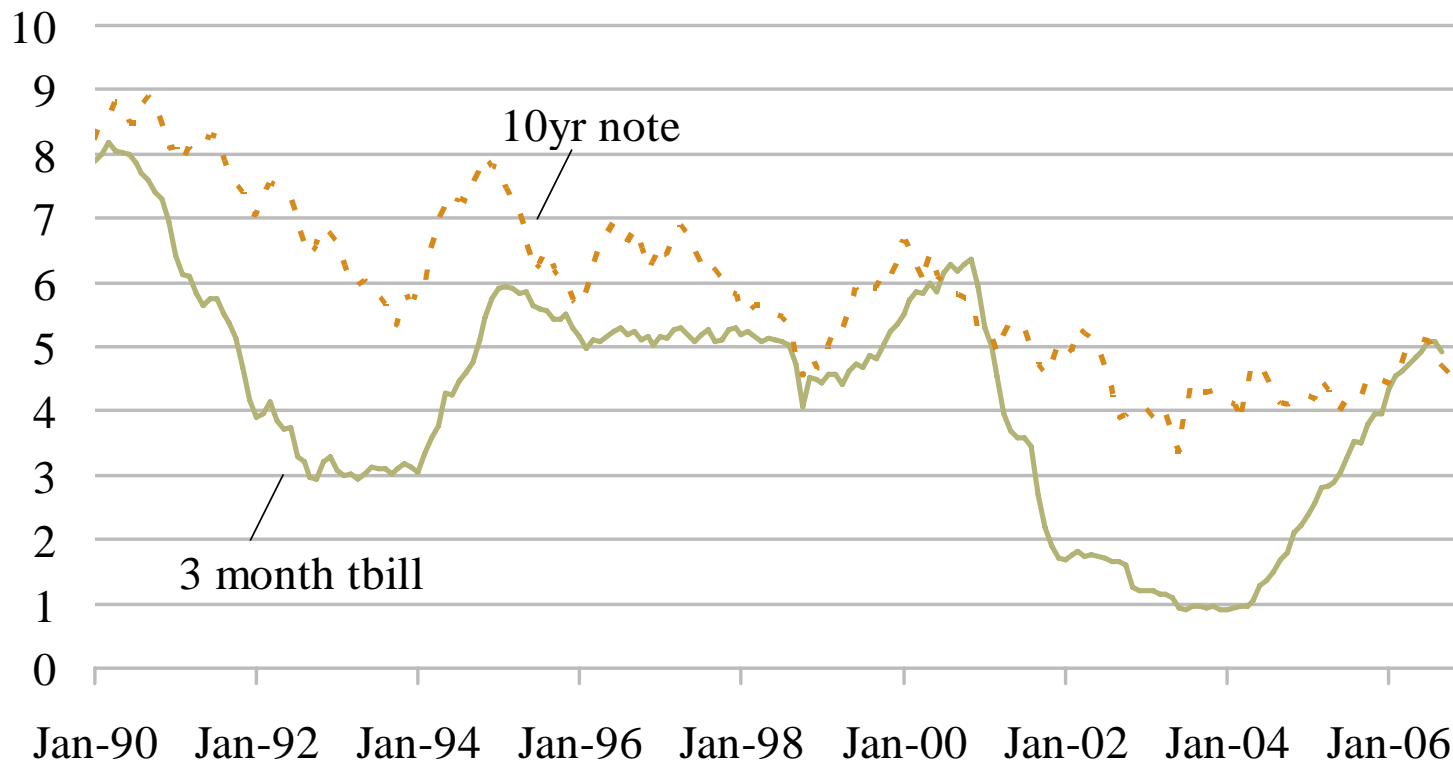
The Federal Reserve

The Fed: Impact on the Bond Market

When the Fed raises the funds rate, it tends to put upward pressure on other interest rates – which count

- ◆ This ultimately feeds into the borrowing costs for consumers and businesses, slowing spending

10-year and 3-month Treasuries, %



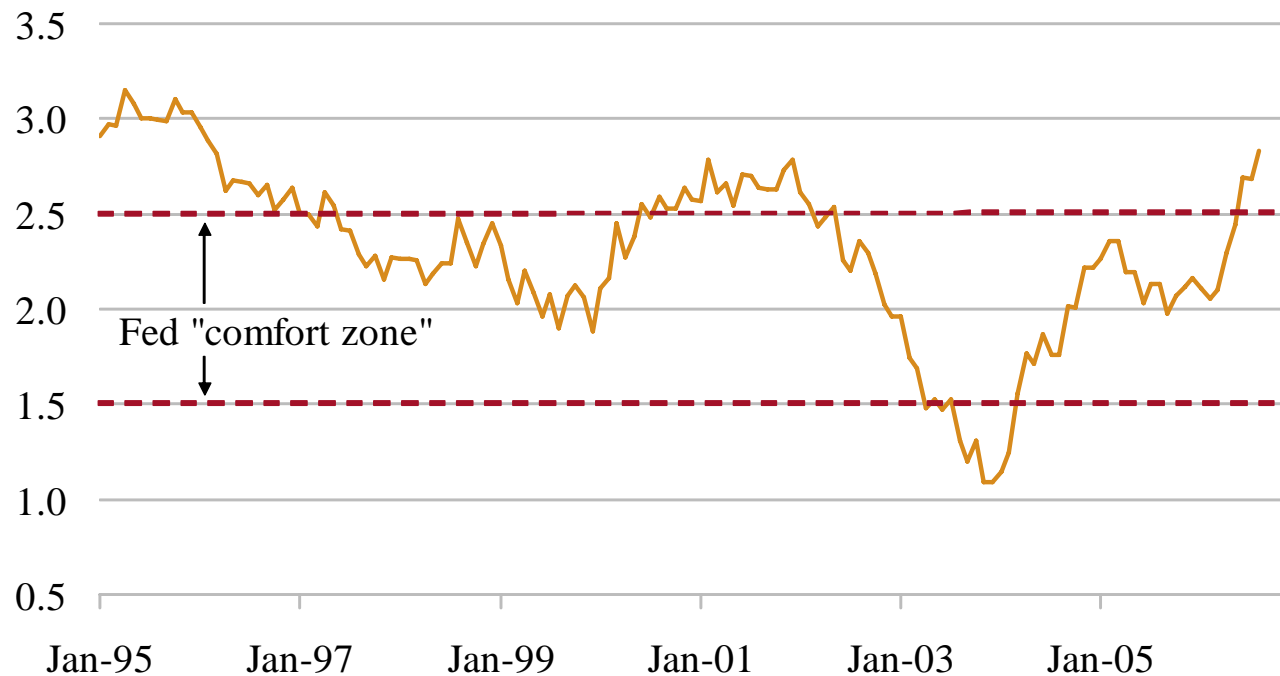
Source: US Treasury.

The Fed: Reacting to Inflation

The Fed will raise the funds rate if it is concerned about excessive inflation

- ◆ By raising rates they help to cause weakness in financial markets, which in turn will slow down spending in the economy
- ◆ The Fed worries about higher inflation because rising prices tend to distort decision making in the economy

Core CPI and Federal Reserve “Comfort Zone”, %y-o-y



Source: Bureau of Labor Statistics.

The Fed: Reacting to Tight Labor Markets

The Fed also tends to raise the funds rate if capacity is tight

- ◆ Tight capacity creates inflation risks
- ◆ At 4.6%, current unemployment rate is below its full employment threshold (5%)



Source: BLS and Lehman Brothers

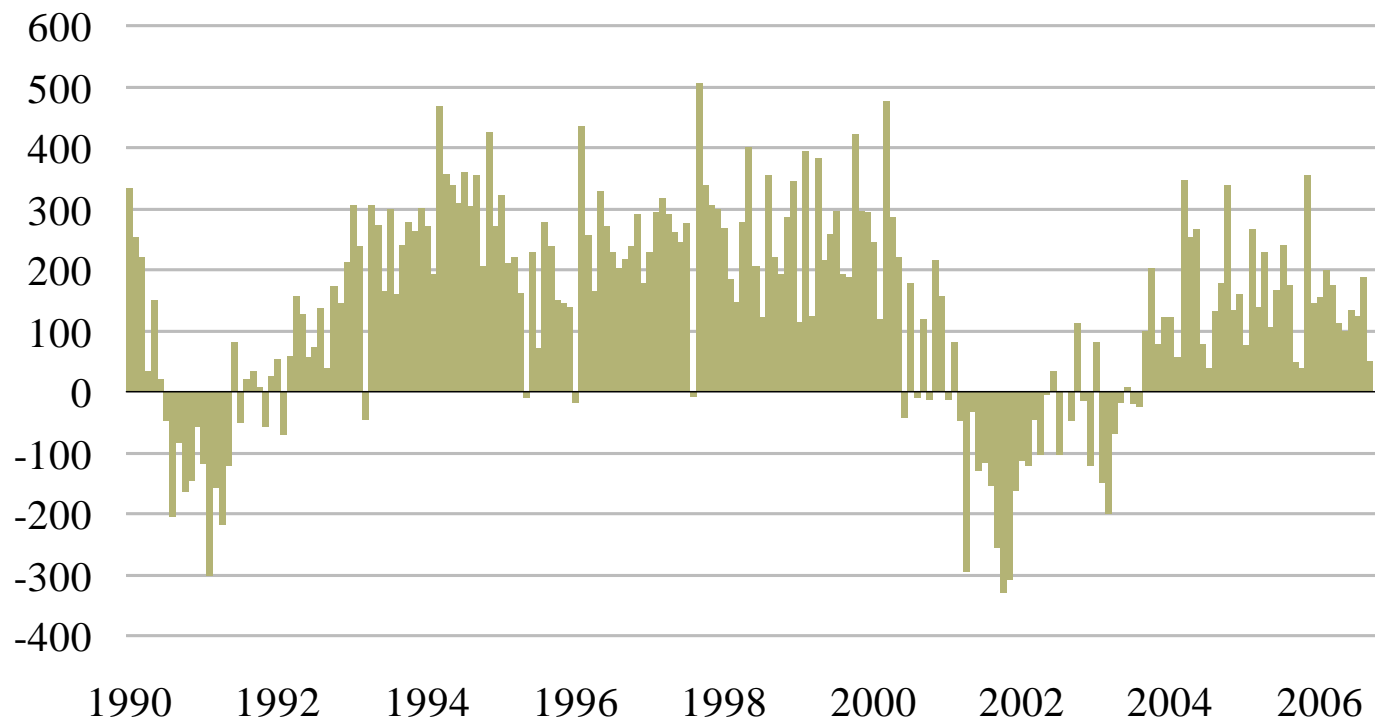
The Data Flow

Payrolls

The single most important piece of data

- ◆ The best piece of data: timely, quality, “feeder” into lots of other data
 - Payrolls and Unemployment Rate
 - Also pay attention to average hourly earnings, workweek

Monthly payroll change, '000 m-o-m



Source: Bureau of Labor Statistics

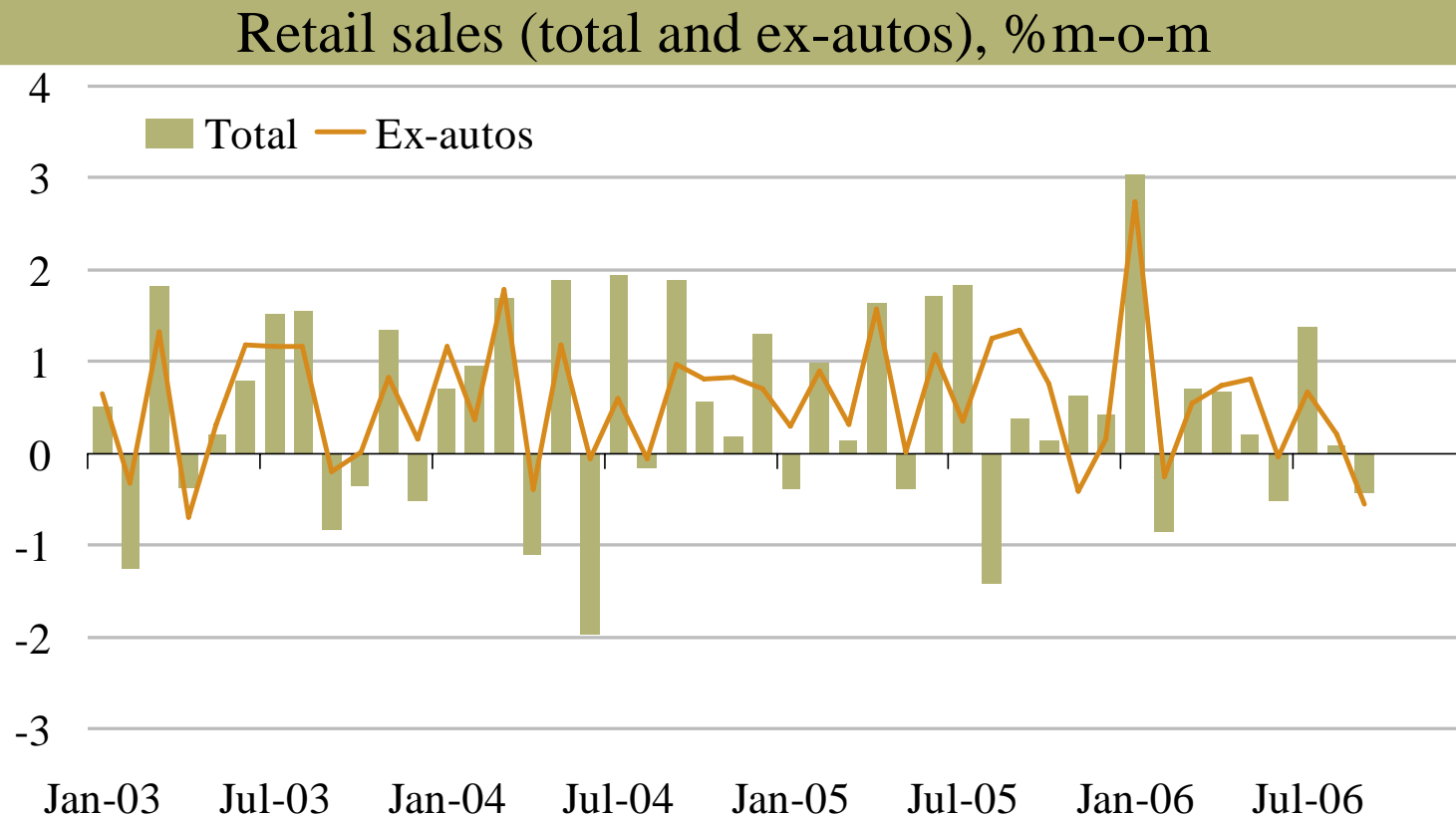
Other Labor Data

- ◆ Initial jobless claims (weekly)
- ◆ Challenger layoffs (monthly)
- ◆ Labor productivity (quarterly)
- ◆ Employment cost index (quarterly)

Retail Sales

The key indicator of consumer spending

- ◆ Out in the “upper”-middle of the month:
 - Need to exclude very lumpy autos
 - Lots of other factors – gasoline, building materials



Source: Commerce Department.

Other spending data

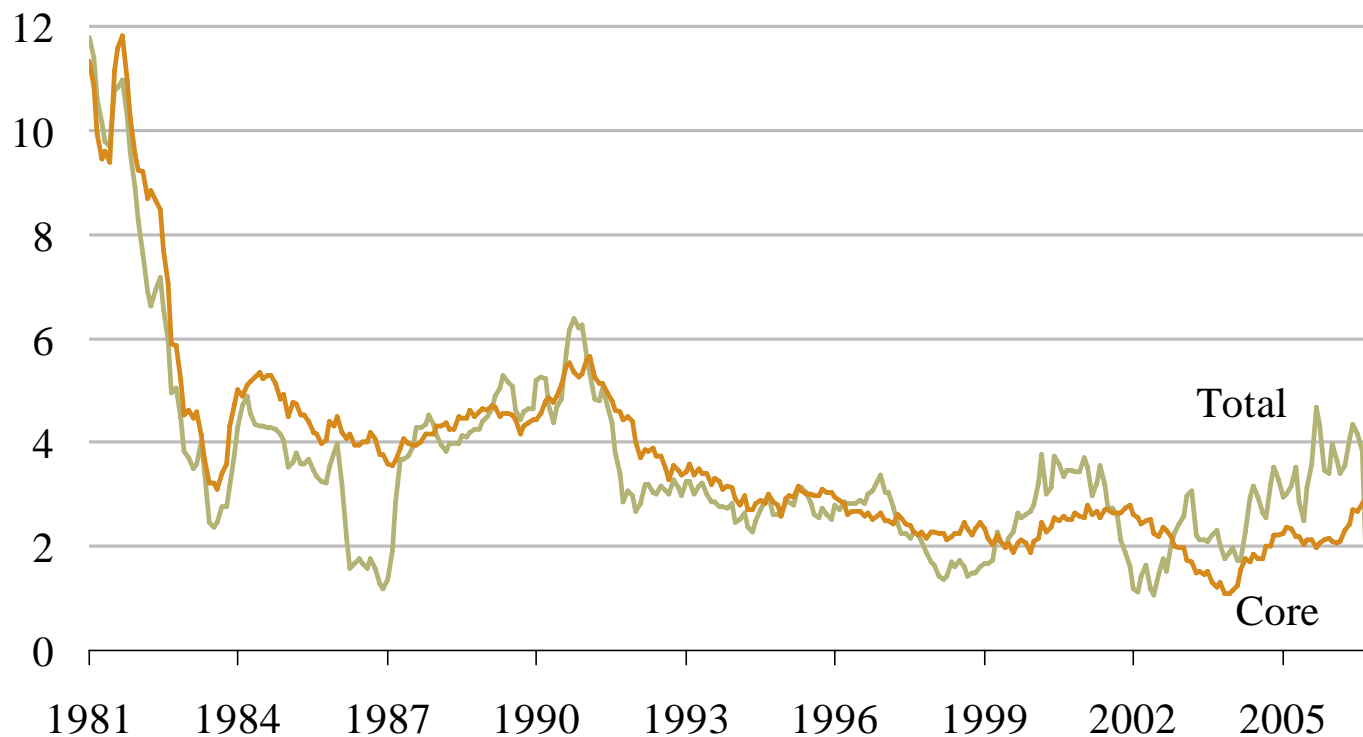
- ◆ Same Store Sales (weekly)
- ◆ Chain store sales (monthly)
- ◆ Auto sales (monthly)
- ◆ Personal consumption/income report (monthly)
- ◆ Consumer confidence measures
 - University of Michigan (twice a month)
 - Conference month (monthly)
 - Investors Business Daily/TIPP (monthly)
 - ABC Consumer Comfort (weekly)

Consumer price index

The main inflation indicator for the markets

- ◆ Core number is the key to look at
 - Market has disregarded headline number
 - Core PCE deflator technically better, and preferred, but less timely (2 weeks)

Consumer price index, % y-o-y



Source: Commerce Department.

Other inflation data

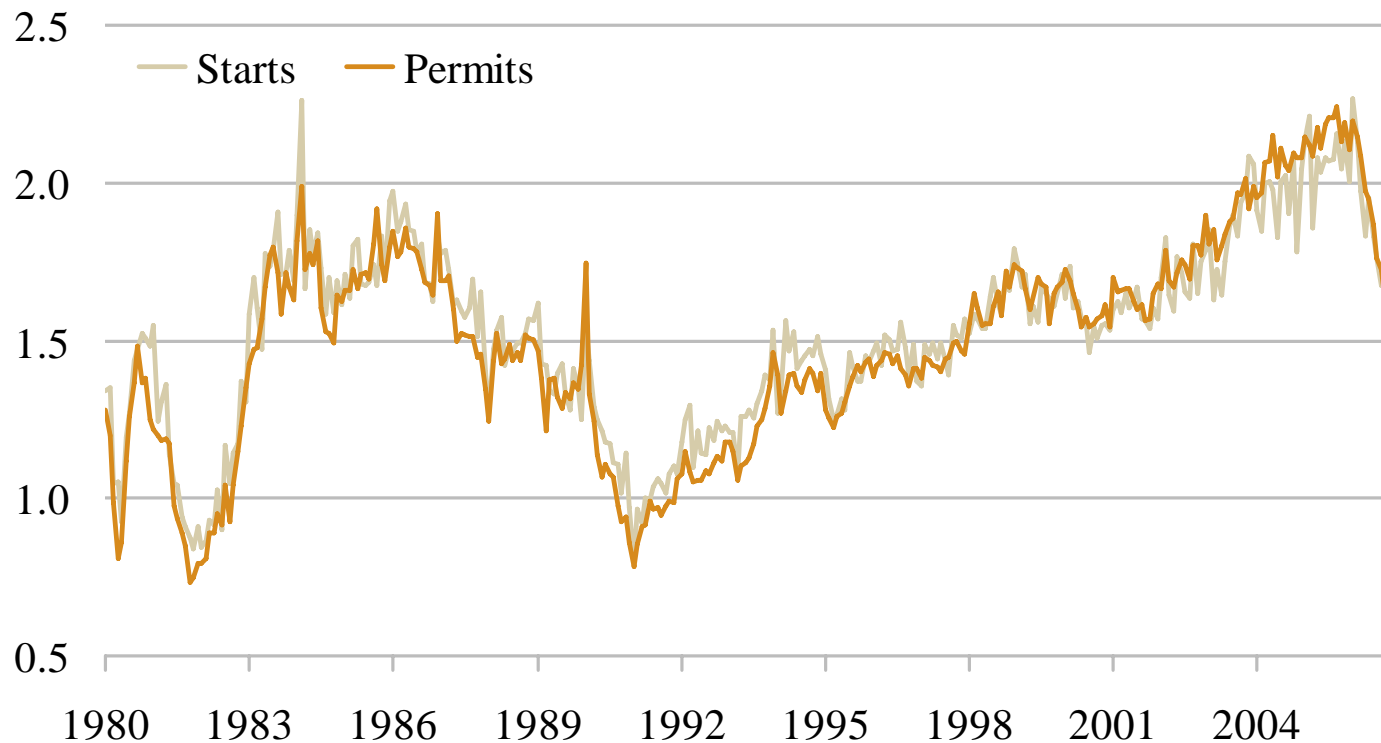
- ◆ Import prices (monthly)
- ◆ Producers Price Index (monthly)
- ◆ Personal consumption expenditure deflator (monthly)
- ◆ Daily spot prices on energy/commodity prices

Housing starts/building permits

Starts and permits are among one of many housing data points

- ◆ Note permits are relatively smoother:
 - Starts frequently distorted by weather
 - Must pay attention to all the housing data: no “dominant” housing data

Housing starts and building permits, 'm SAAR



Source: Commerce Department.

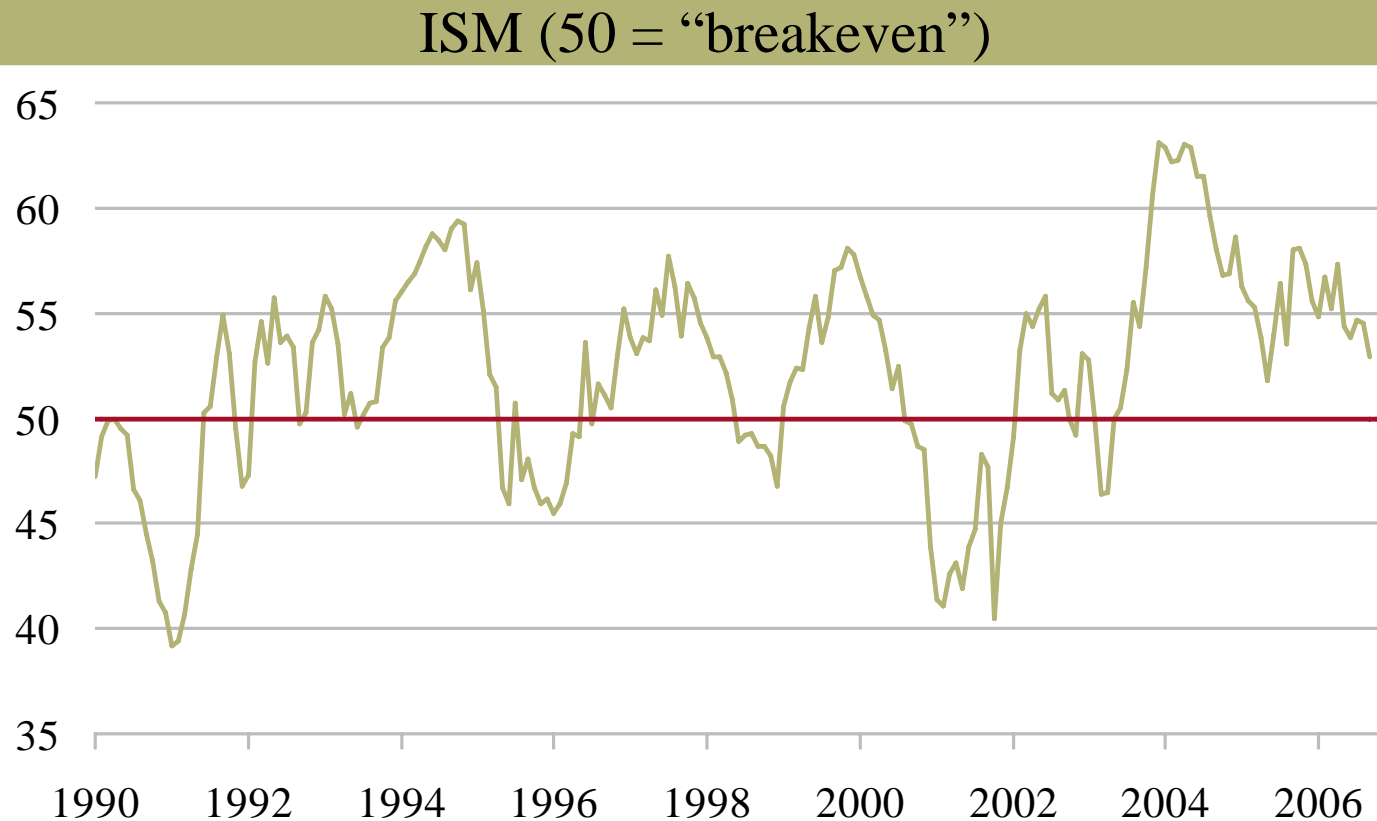
Other Housing Data

- ◆ MBA Refinancing and Purchasing indices (weekly)
- ◆ NAHB Homebuilder Sentiment (monthly)
- ◆ Existing home sales (monthly)
- ◆ New home sales (monthly)
- ◆ OFHEO Home Price Index (quarterly)

Institute of Supply Management

The primary driver of consumer spending is income growth

- ◆ Income growth depends on:
 - Strength of the job market
 - Growth in wages and salaries



Source: Commerce Department.

Other Manufacturing

- ◆ Industrial production/capacity utilization
- ◆ Durable goods orders
- ◆ Factory orders
- ◆ Regional ISMs
 - Chicago
 - Philadelphia
 - New York (“Empire State”)
- ◆ Non-manufacturing ISM (only interesting before payrolls)

Other Important Market Moving “Data”

- ◆ FOMC Announcements (8 times a year)
 - FOMC Minutes (3 weeks afterward)

- ◆ Speeches by Fed Chairman Bernanke
 - Especially semiannual testimony (with forecasts)

- ◆ Speeches by certain other Fed officials
 - Kohn, voting presidents (Lacker/Pianalto/Poole/Yellen)

- ◆ GDP Reports (quarterly)

End Game

October 2006



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Outline

- ◆ A correction, not a crash
- ◆ Creeping core inflation
- ◆ “Pause” does not mean “finished”

Outlook at a Glance...

	2006				2007			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
	<i>Actual</i>		<i>Forecast</i>		<i>Forecast</i>			
Real GDP (% , q-o-q, ar)	5.6	2.6	1.6	3.2	2.5	2.8	3.0	3.0
Core CPI (% , y-o-y)	2.1	2.5	2.8	3.0	3.1	2.9	2.8	2.6
Fed funds (eop)	4.75	5.25	5.25	5.25	5.50	5.50	5.50	5.50

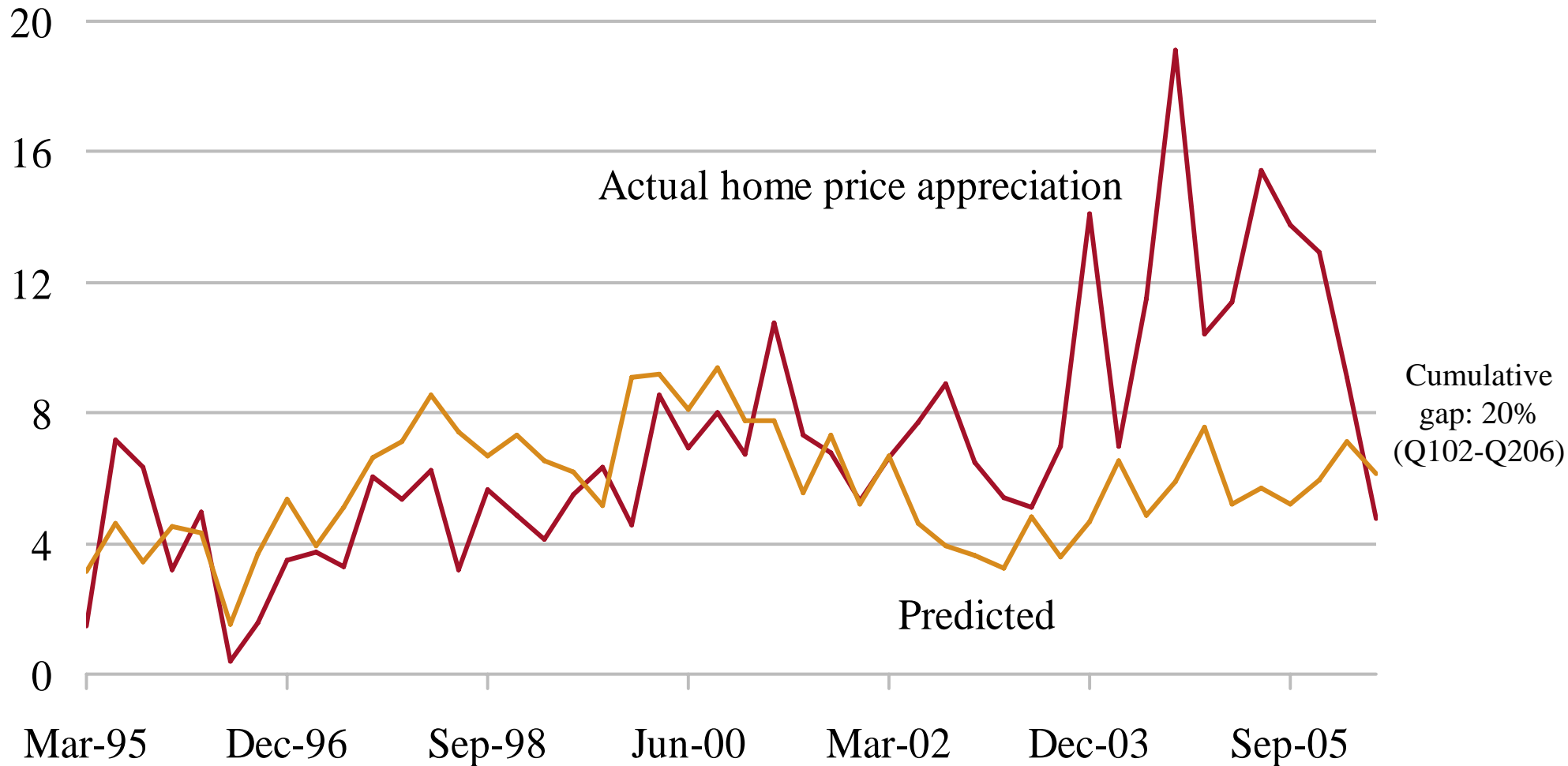
GDP outlook

GDP COMPONENTS (%)	2005	2006	2007	Comment
Private consumption	3.5	3.3	2.8	Dimishing wealth effect
Residential fixed investment	8.6	-3.8	-10.3	Housing slowdown
Nonresidential fixed investment	6.8	8.0	9.2	Steady strength
Government expenditures	0.9	2.2	2.5	State and local spending
Exports	6.8	8.8	7.8	Weak dollar
Imports	6.1	6.7	5.8	Slowdown in imports next year
<i>GDP contributions</i>				
Final sales	3.5	3.1	2.7	
Change in private inventories	-0.3	0.1	-0.1	Room to recover
GDP	3.2	3.3	2.7	

Source: Commerce Department and Lehman Brothers.

Housing Prices: The Cumulative Error

OFHEO price inflation (% q-o-q, ar)

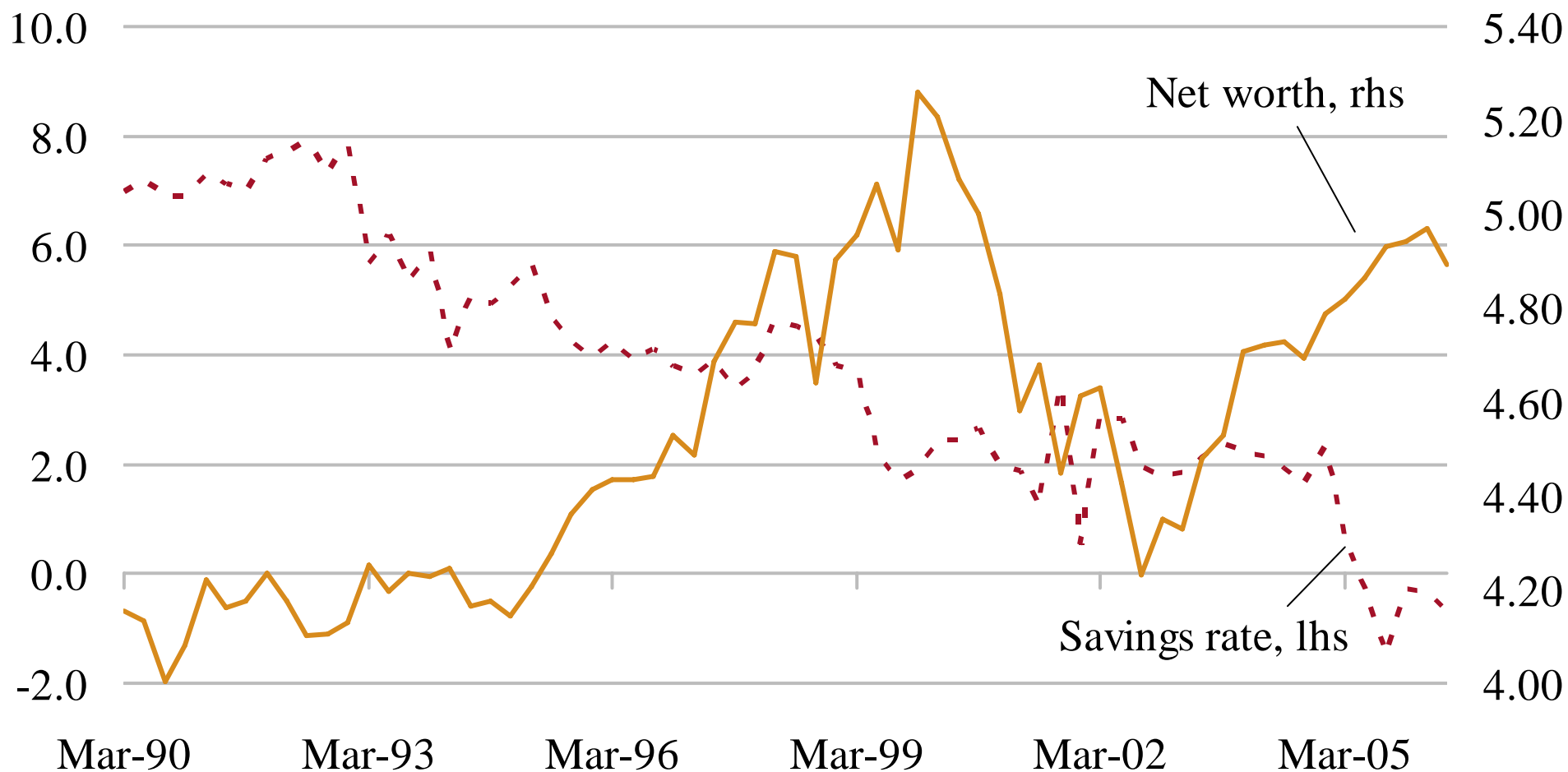


Note: Predicted based on model with income, mortgage rates and wealth variables

Source: Office of Housing Enterprise Oversight and Lehman Brothers

Consumption – No Rush To Raise Savings

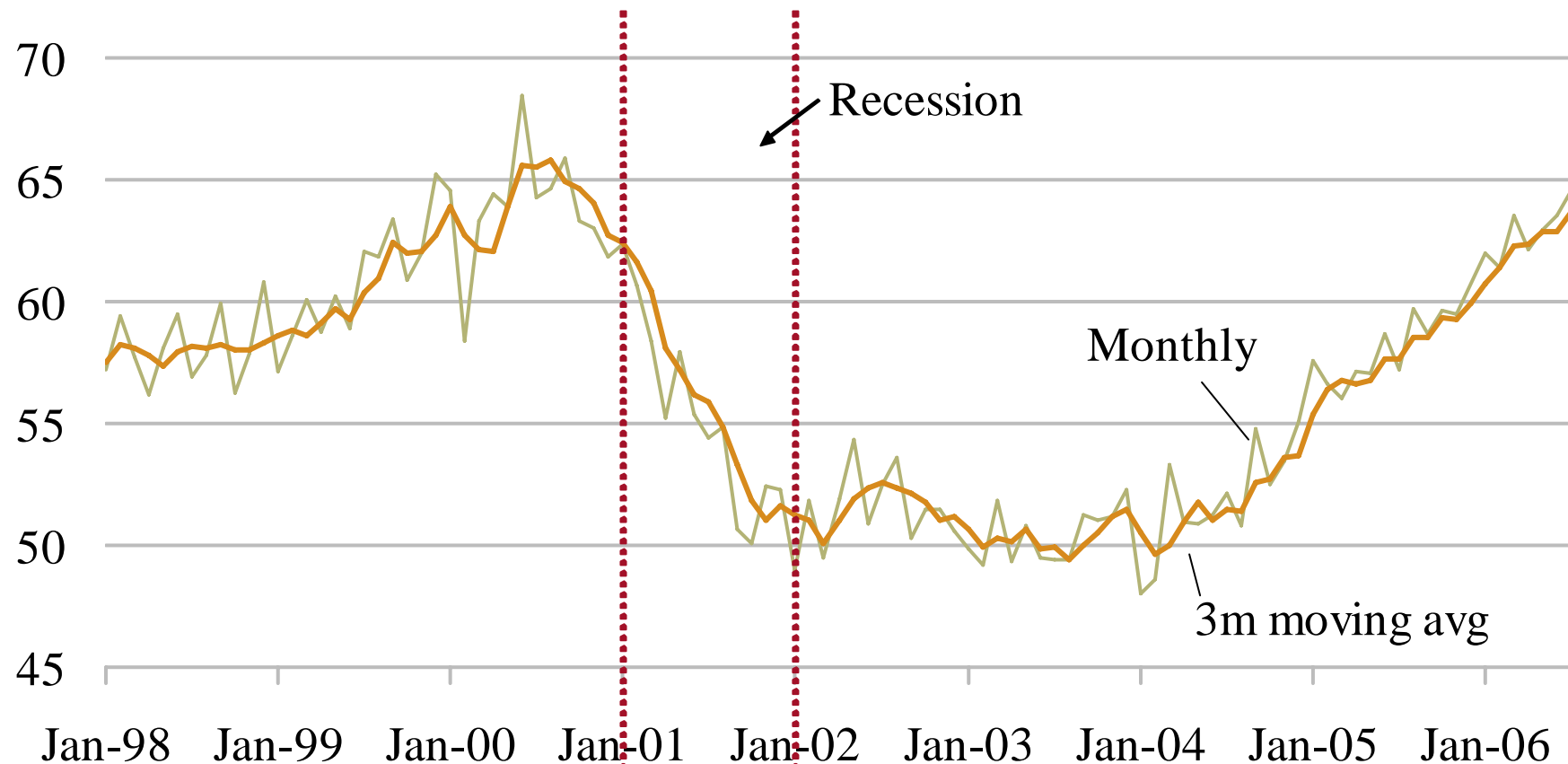
Savings rate and net worth as a share of income (%)



Source: Commerce Dept and Federal Reserve Board FOF

Corporate America: Capital Spending

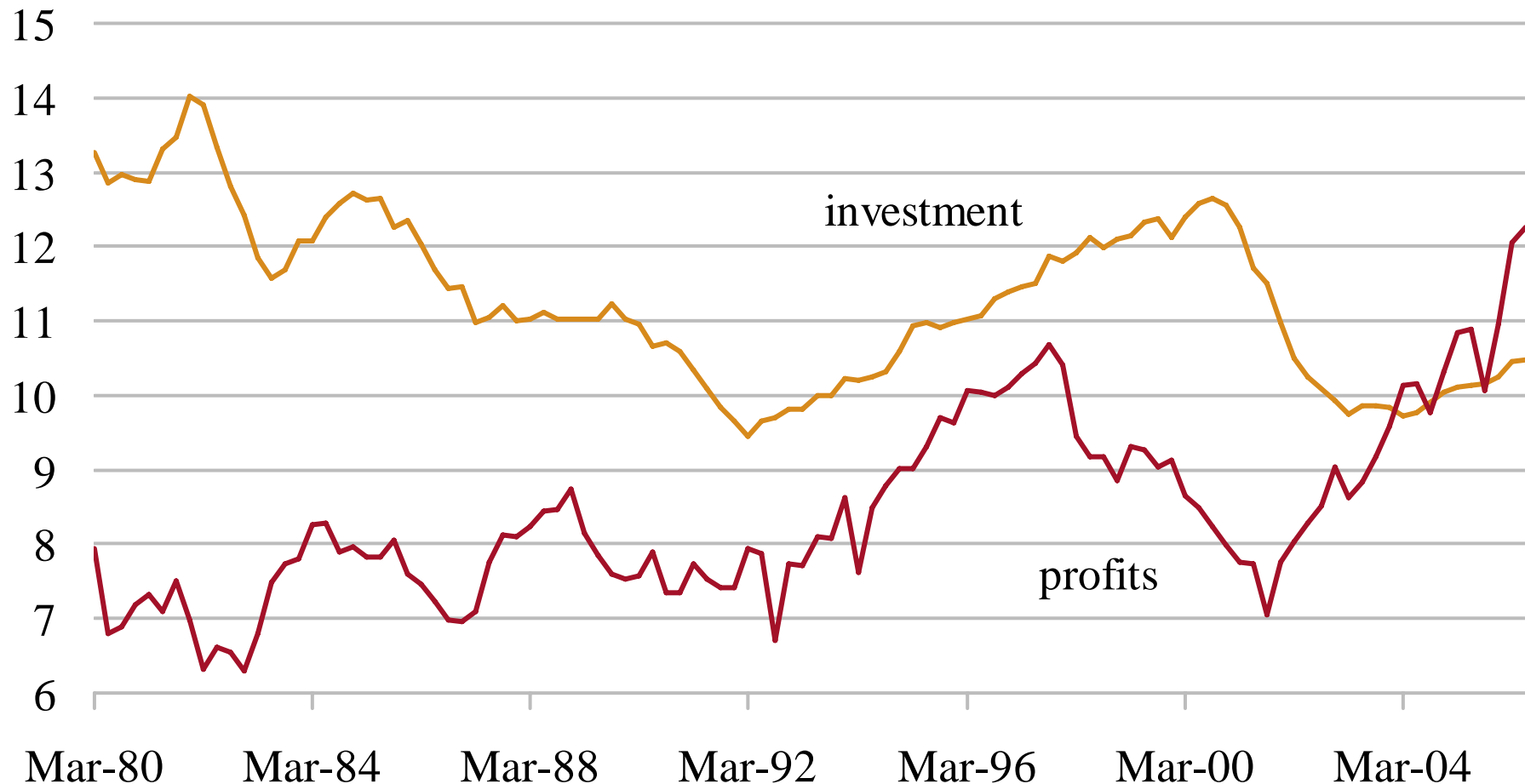
Core capital goods orders (\$bn)



Source: Census Department and Lehman Brother
Note: Non-defense capital goods orders excluding aircraft

Corporate America: Keeping Cash

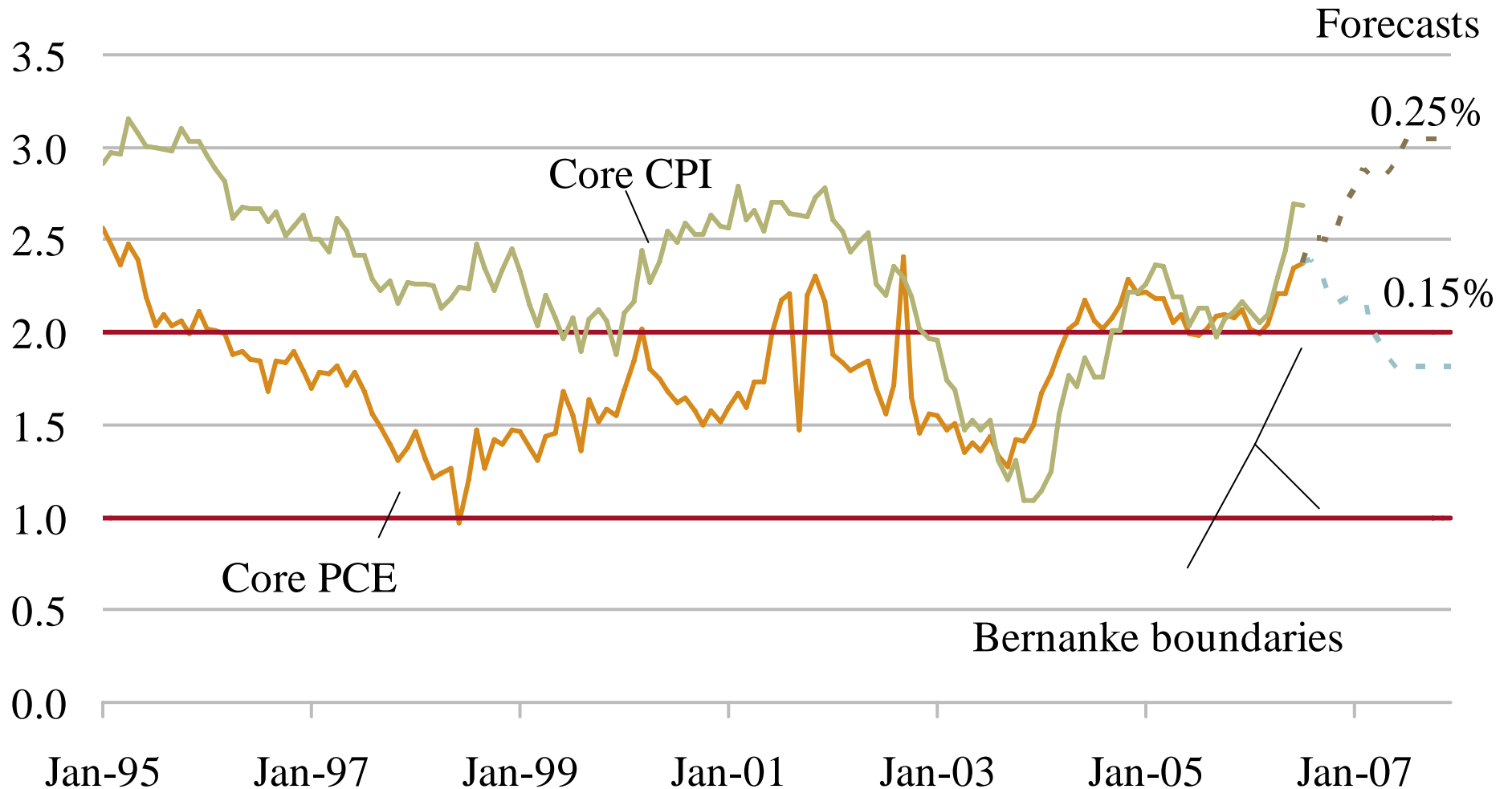
Business fixed investment and profits (current \$, %GDP)



Source: Commerce Department

Core Inflation

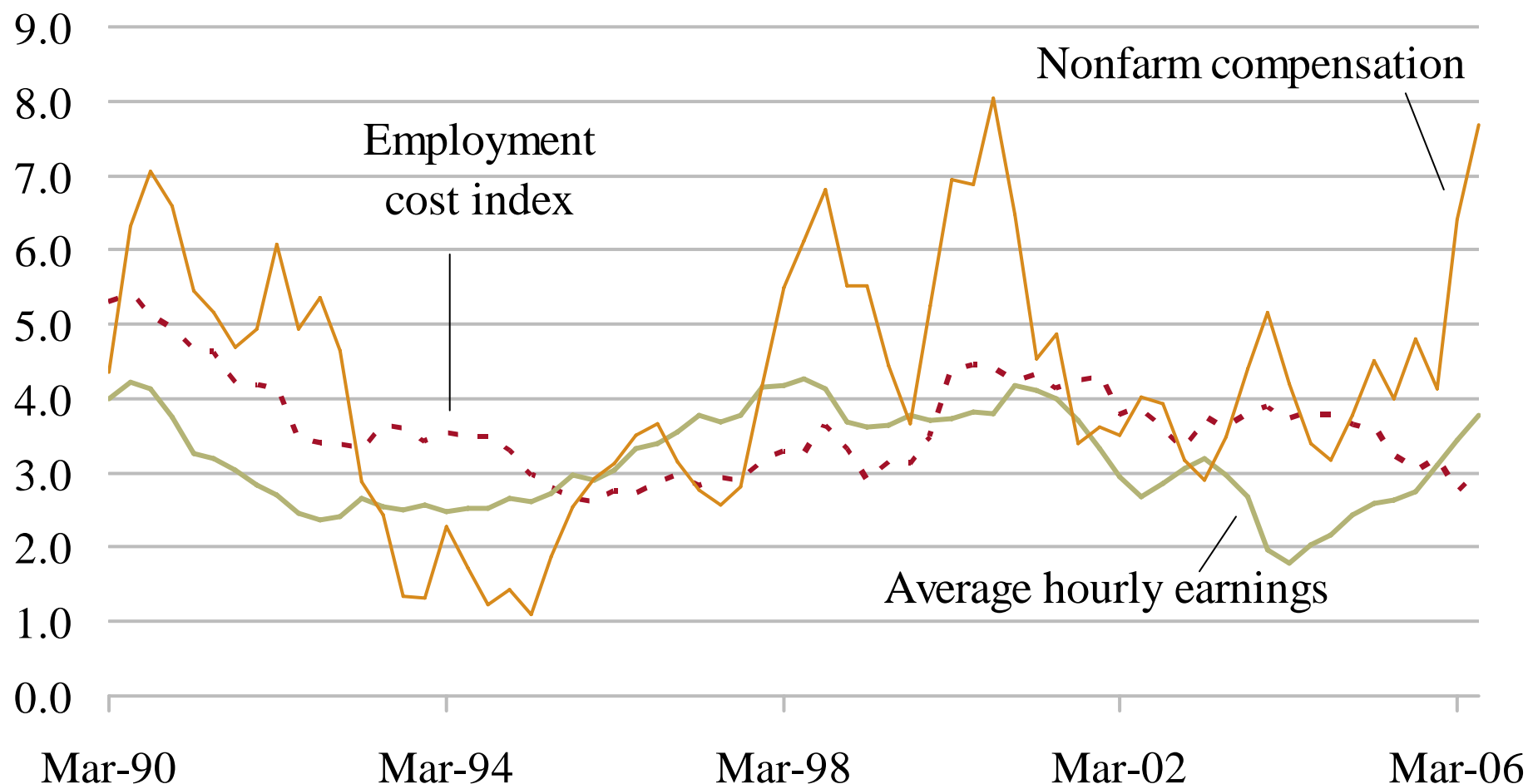
Core PCE and core CPI (%y-o-y)



Source: Commerce Department and Lehman Brothers.

Inflation – Compensation Growth

Measures of employee compensation (%y-o-y)



Source: BLS and BEA

Fed – Does “Pause” Mean “Finished”?

The case for pausing

- ◆ Growth has slowed to below potential
- ◆ Housing outlook highly uncertain
- ◆ The markets are comfortable with a pause

The case for reluctantly resuming

- ◆ Growth will likely remain above 2%
- ◆ Core PCE inflation will likely breach the $2\frac{1}{4}$ - $2\frac{1}{2}$ forecast
- ◆ Housing correction more likely than crash

The Fed's Talk

From the Oct 25th FOMC Statement

- ◆ “Readings on core inflation have been elevated, and the high levels of resource utilization has the potential to sustain inflation pressures.”

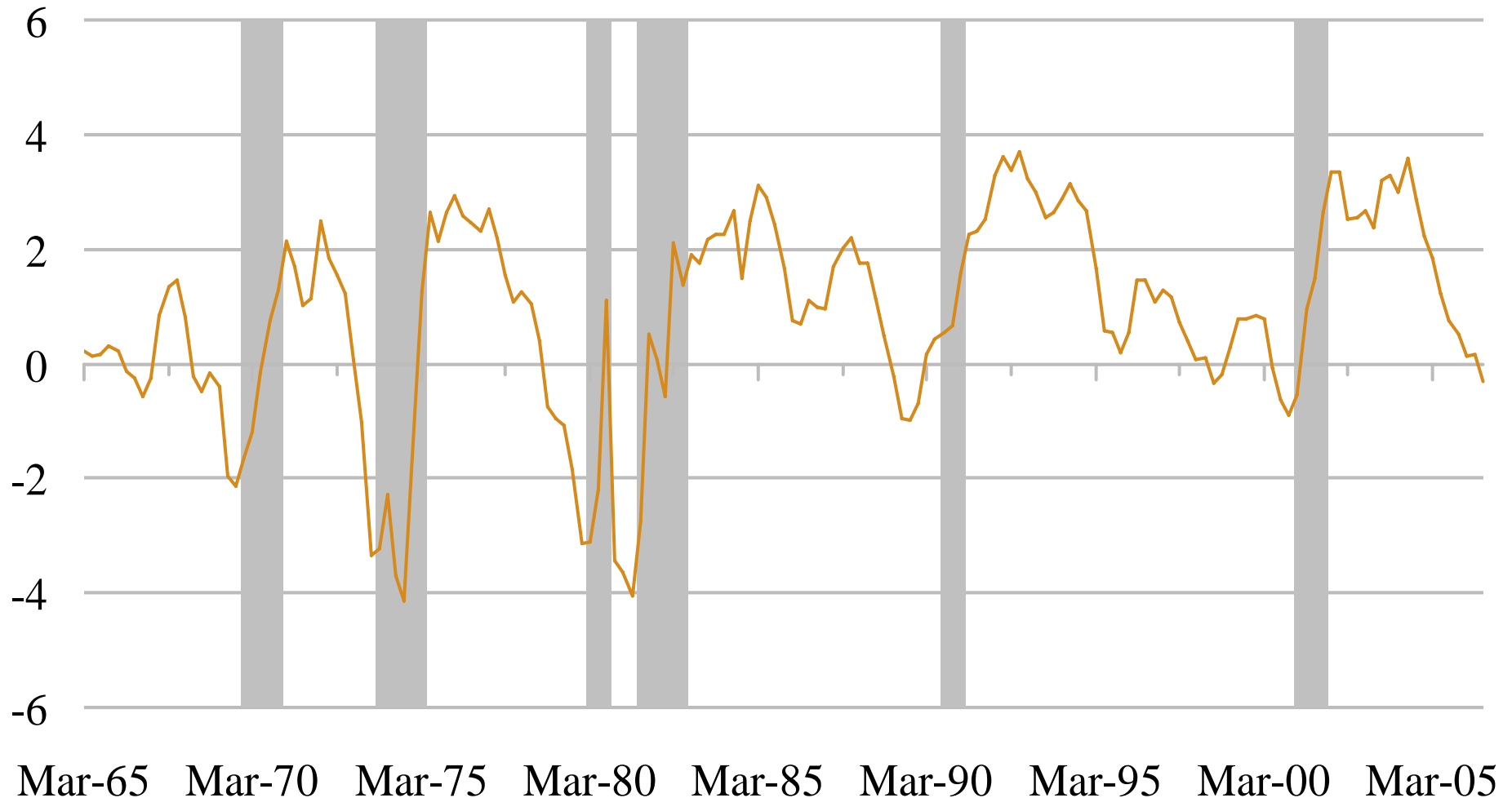
Disconnect (and dissent)

- ◆ “However, inflation pressures seem likely to moderate over time, reflecting impetus from energy prices, contained inflation expectations and *the cumulative effects* of monetary policy actions and other factors restraining aggregate demand.”

Source: Federal Reserve Board, and Lehman Brothers.

Inversionomics—A “Perfect” Track Record

TSY 10yr – Fed funds spread

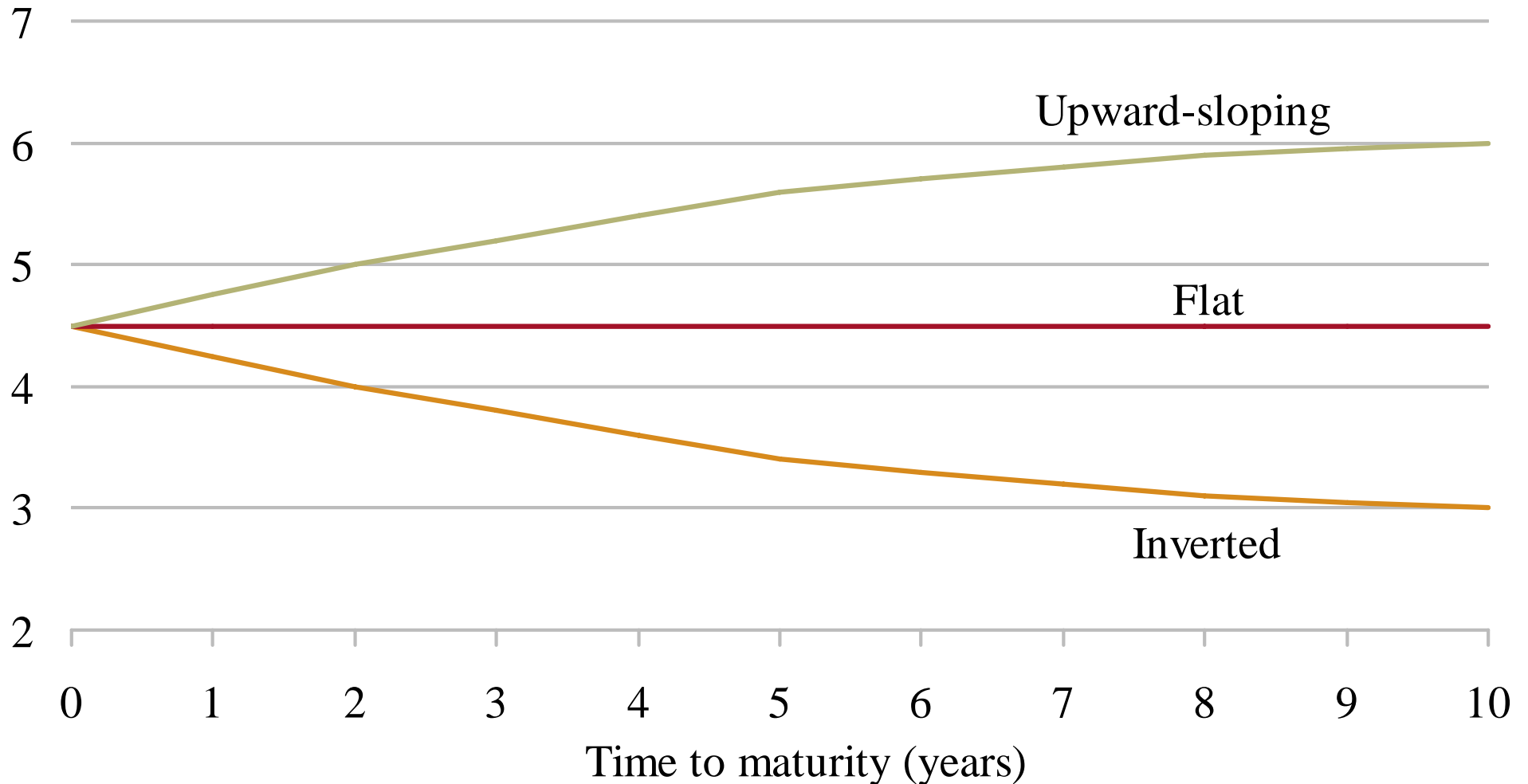


Note: Shaded areas denote recessions (NBER)

Source: Federal Reserve Board, US Treasury and Lehman Brothers

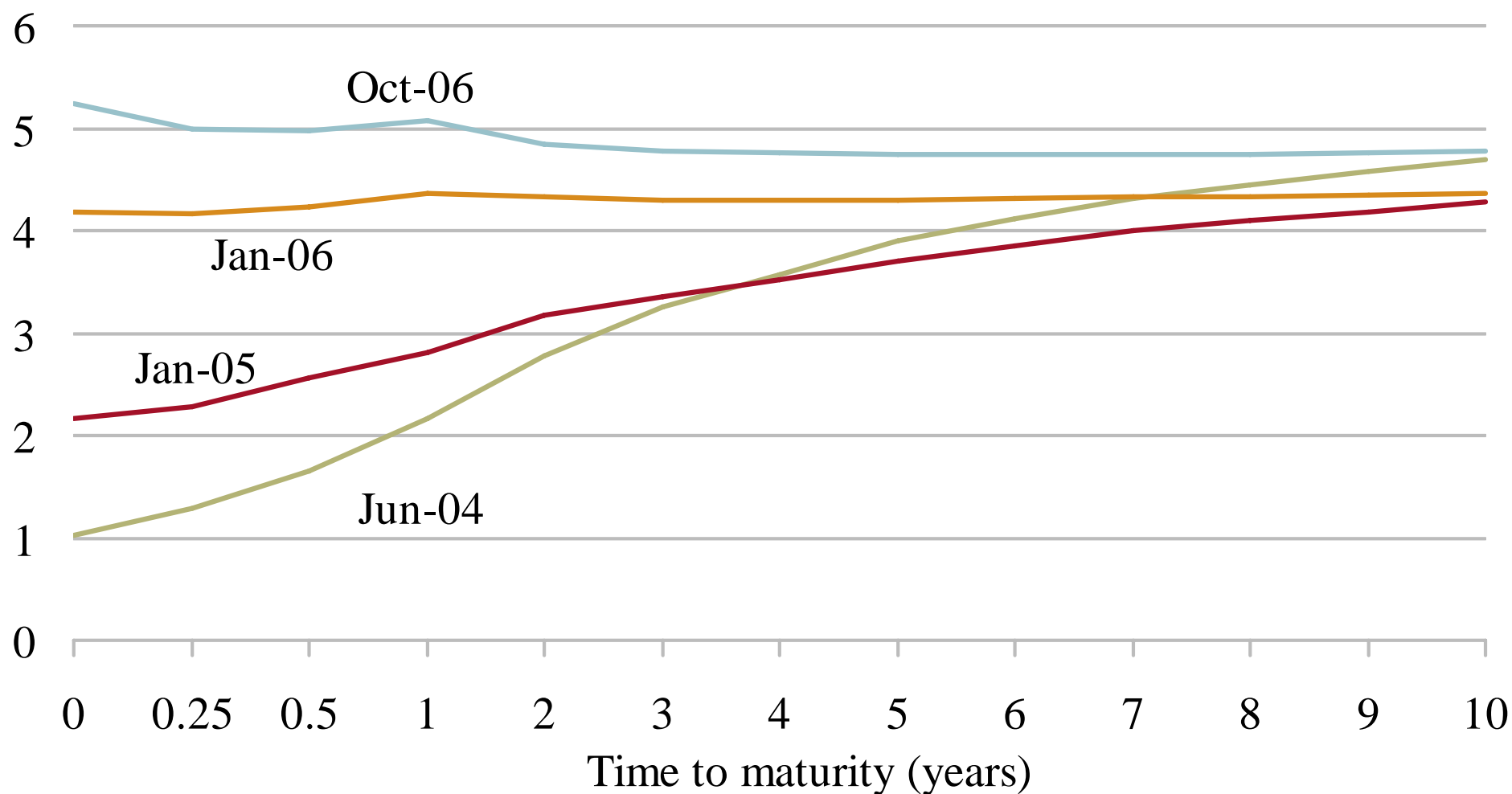
Yield Curve: Shapes

Treasury yields over different maturities



Yield Curve: Current rate hiking cycle

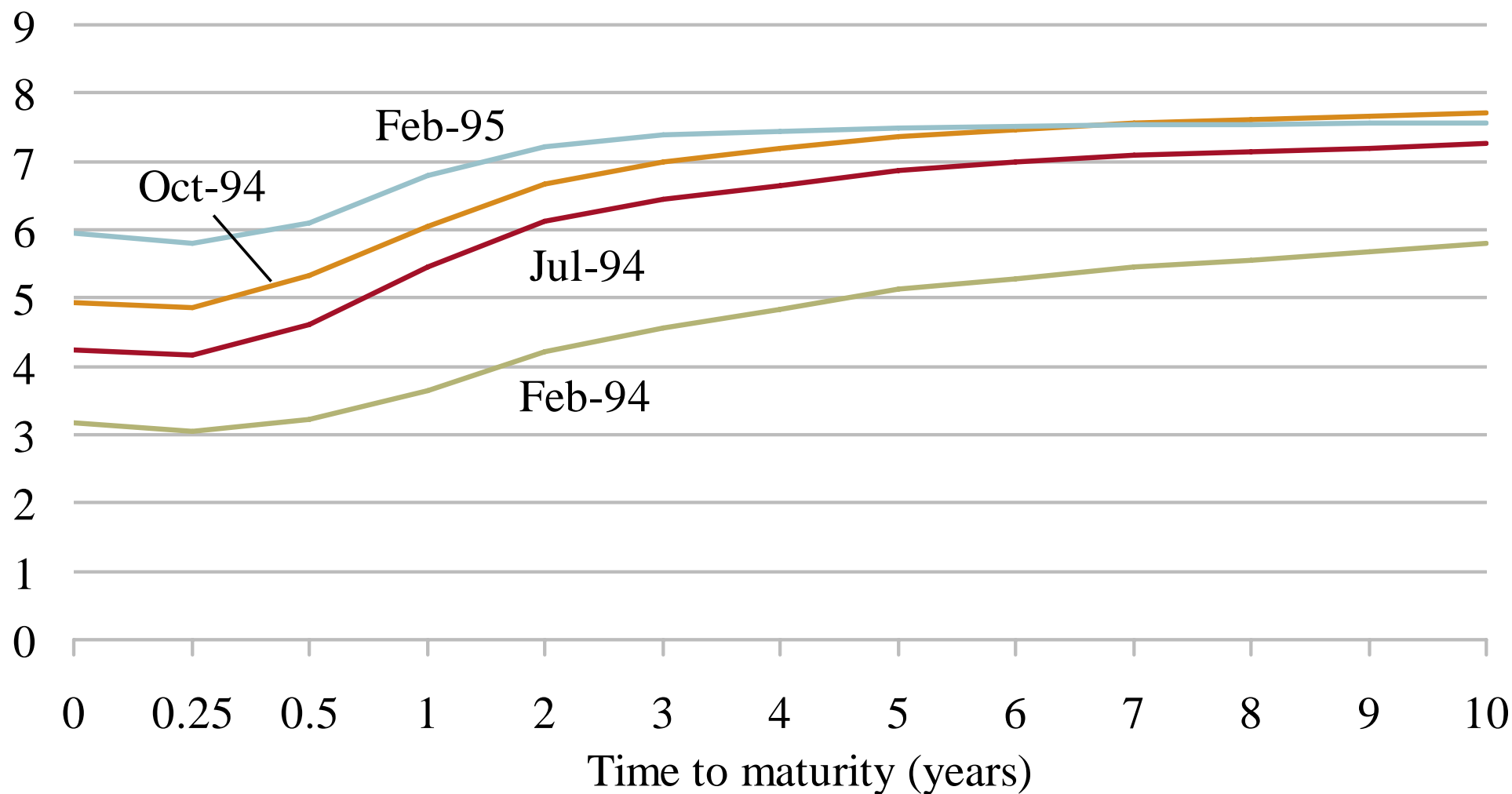
Yield curve



Source: Federal Reserve

Yield Curve: The 1994 rate hiking cycle

Yield curve



Source: Federal Reserve

Inversionomics: Symptom, not cause

Yesterday's Inversion

- ◆ Fed deliberately risking recession
- ◆ Real funds 3 – 5%
- ◆ Bond yields rise, but less than short-rates
- ◆ Numerous signs of financial stress
- ◆ Stressed banks ration credit

Today's Inversion

- ◆ Fed looking for soft landing
- ◆ Real funds 2.5%
- ◆ Bond yields flat as foreign savings flow in
- ◆ No signs of financial distress
- ◆ Aggressive promotion of hybrid mortgages

Source: Federal Reserve Board and Lehman Brothers.

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